

Work Order ID 151655

Wednesday, October 05, 2016 3:08:54 PM

151655

Page 1

Item ID: 646.3301

Revision ID:

Item Name: Upper Cutter Assy

Start Date: 9/27/2016 Start Qty: 5.00

Required Date: 10/24/2016 Req'd Qty: 5.00

Reference:

Accept

N900040100

Setup Start

NS1

Stop

NS2

Cust Item ID:

Customer:

Approvals:

Process Plan:

DAS

21

Date: OCT 06 2016

Tooling:

Date:

QC:

9-89

Date:

SPC (Y/N):

Date:

Run Start

NR1

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

646.3300

NC3

110

Pick Kit

0.00

110

Packaging

Memo

0.07

Packaging

8 DAS 6 9-8

NGV 07 2016

120

0.00

120

Small Fab

Memo

0.50

Small Fab

TWO fastener must be install finger-tight (see note 9)

Assemble as per dwg and apply loctite 598 on all faying surfaces shown on dwg per note 7.

A/R RTV LOCTITE 598:

exp. date: 04/8

135385

5X 16/12/19 DAS 38 9-89

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Work Order ID 151655

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151655

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Item ID: 646.3301 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Upper Cutter Assy
Start Date: 9/27/2016 Start Qty: 5.00 ***5*** Cust Item ID:
Required Date: 10/24/2016 Req'd Qty: 5.00 ***5*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC5- Inspect part completeness to step on W/O	0.00							
130									
QC	Memo	0.07							
Quality Control									
									DAS 9 9-89
140	Identify as per dwg & Stock Location: CCK 18	0.00							
140									
Packaging	Memo	0.02							
Packaging	***IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND REV***								
									DAS 26 9-89
150	QC21- Final Inspection - Work Order Release	0.00							
150									
QC	Memo	0.01							
Quality Control									
									DAS 21 9-89
									DEC 19 2016

DEC 19 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval 	
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
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LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐								
Misidentified	☐	Past Due	☐	OTHER :							

Picklist Print

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Work Order ID: 151655

151655

Parent Item: 646.3301

646.3301

Parent Item Name: Upper Cutter Assy

Start Date: 9/27/2016

Required Date: 10/24/2016

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP REV:A 12.10.19 NEW ISSUE DD VERF:JLM IPP
REV:B 15.01.07 AS PER DWG NC3 DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
646.3310 *646.3310* LH Half - Upper Cutter Assembly		Manufactured	No			110	Each	5.0000	1	5	DAS 6 9-89	NOV 07 2016	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				CCK022		5							
				148318		5				5	DAS 6 9-89		
646.3311 *646.3311* RH Half - Upper Cutter Assembly		Manufactured	No			110	Each	3.0000	1	5	DAS 6 9-89	NOV 07 2016	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				CCK022		3							
				142624		3				150624	DAS 6 9-89		
646.3312 *646.3312* Center Plate		Manufactured	No			110	Each	5.0000	1	5	DAS 6 9-89	NOV 07 2016	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				cck103		5							
				148334		5				5	DAS 6 9-89		
646.3313 *646.3313* Upper Guide		Manufactured	No			110	Each	7.0000	1	5	DAS 6 9-89	NOV 07 2016	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				cck059A		7							
				141020		7				5			

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
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Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																				
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Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																				
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Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____																							
Misidentified ☐	Past Due ☐																								

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Work Order ID: 151655

151655

Parent Item: 646.3301

646 3301

Parent Item Name: Upper Cutter Assy

Start Date: 9/27/2016

Required Date: 10/24/2016

Start Qty: 5.00

Required Qty: 5.00

646.3314 Manufactured No

110 Each 11.0000 1 5

646 3314

Blade

**

NOV 07 2016

DAS
6
9-89

Location

Loc Qty

Loc Code

cck103

11

148327

3

149314

8

646.3315 Manufactured No

110 Each 3.0000 1 5

646 3315

Blade

**

NOV 07 2016

DAS
6
9-89

Location

Loc Qty

Loc Code

cck103

3

148321

3

646.3316 Manufactured No

110 Each 4.0000 1 5

646 3316

Blade

**

NOV 07 2016

DAS
6
9-89

Location

Loc Qty

Loc Code

cck103

4

148271

4

NAS1149FN832P Purchased No

110 Each 2,455.000 36 180

NAS1149FN832P

Washer

**

NOV 07 2016

DAS
6
9-89

Location

Loc Qty

Loc Code

GA

1537

M133769

89

M135058

1448

ST263

918

M135603

918

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____			DISPOSITION ☐ Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved		AGAINST DEPARTMENT/PROCESS ☐ Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other						
Date :		Step #:			QTY Effective :				MRB (QSI042) Approval		
Description Work Order Deviation					Disposition					Completed By	
										Lead hand / Supervisor Approval Verification	
										QC / QA Coordinator Approval	
Root Cause ☐ Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due					FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence						
OTHER :											

Picklist Print

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Work Order ID: 151655

151655

Parent Item: 646.3301

646.3301

Parent Item Name: Upper Cutter Assy

Start Date: 9/27/2016

Required Date: 10/24/2016

Start Qty: 5.00

Required Qty: 5.00

MS21042L08

Purchased

No

110

Each

830.0000

18

90

MS21042L08

Nut

**

NOV 07 2016

DAS

6
9-89

Location

Loc Qty

Loc Code

GA

118

m134063

18

m135274

100

ST303

712

m135536

112

m135566

200

m135672

200

m135766

200

70

NAS1149F0332P

Purchased

No

110

Each

1,400.000

6

30

NAS1149F0332P

Washer

**

NOV 07 2016

DAS

6
9-89

Location

Loc Qty

Loc Code

GA

282

m133709

282

ST262

1118

m135544

1118

30

AN3-12A

Purchased

No

110

Each

219.0000

2

10

AN3-12A

Bolt

**

NOV 07 2016

DAS

6
9-89

Location

Loc Qty

Loc Code

ST349

219

m133064

16

m135603

203

10

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval 	
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
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Work Order ID: 151655

151655

Parent Item: 646.3301

646.3301

Parent Item Name: Upper Cutter Assy

Start Date: 9/27/2016

Required Date: 10/24/2016

Start Qty: 5.00

Required Qty: 5.00

MS21042L3

Purchased

No

110

Each

1,747.000

3

15

MS21042L3

Nut

**

DAS
6
9-89

Location

Loc Qty

Loc Code

FP001

7

M130922

7

GA

245

m134360

112

m135135

133

OVER007

600

m135767

600

ST303

895

m135407

10

m135530

600

m135600

285

15

MS27039-08-19

Purchased

No

110

Each

276.0000

18

90

MS27039-08-19

Screw

**

13-86-55 DAS
6
9-89

Location

Loc Qty

Loc Code

ST277

276

m135536

9

m135566

267

35

AN3-14A

Purchased

No

110

Each

91.0000

1

5

AN3-14A

Bolt

**

DAS
6
9-89

Location

Loc Qty

Loc Code

over003

80

m135056

50

m135600

30

ST349

11

m134360

2

m134852

9

5

NOV 07 2016

NOV 07 2016

NOV 07 2016

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
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Misidentified ☐	Past Due ☐																																																																

APICAL

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04765

SHEET 1 OF 1

DWG NO. 646.3300

REV: NC

PREPARED BY J. SOTO

DATE: 12/08/2014

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: UPPER CUTTER ASSY

APPROVED BY:

ENGR. *[Signature]*

MFG

[Signature]

QC

[Signature]

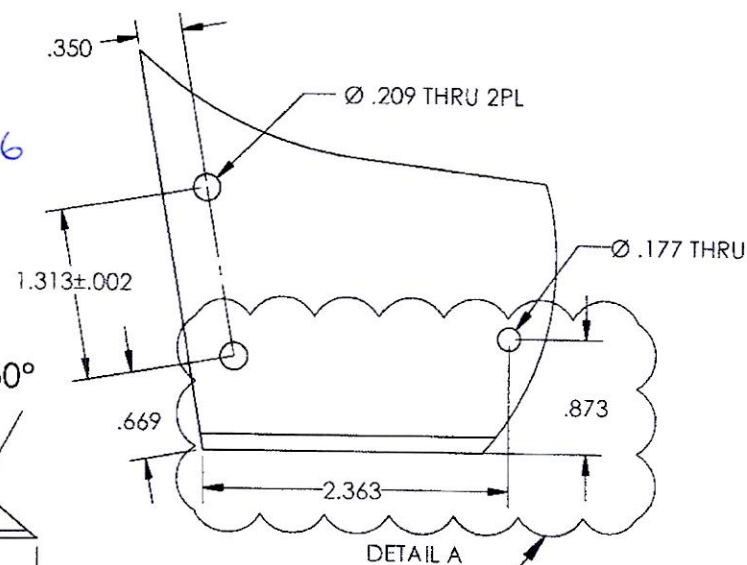
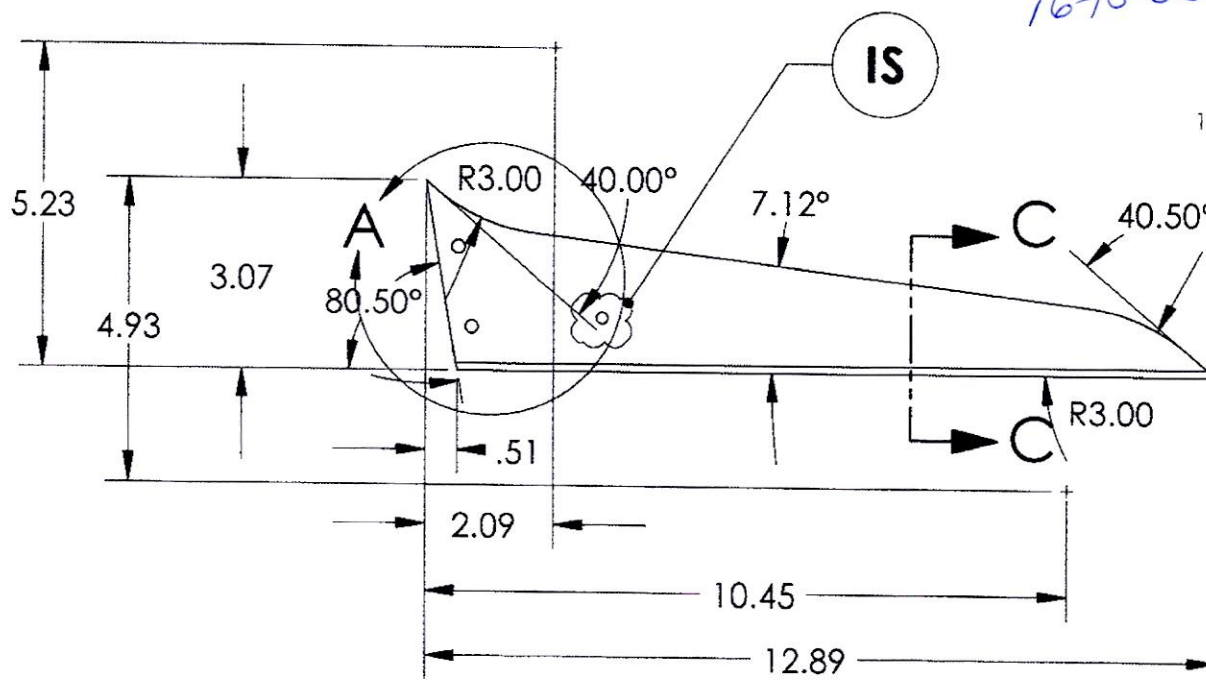
EFF. NEXT ORDER

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

REASON: ADDED HOLE DIMENSION TO 646.3313.

SHEET 5 IS:

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 151655 ML5
1670-06



DOCUMENTS EFFECTED:

☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☐ BOM

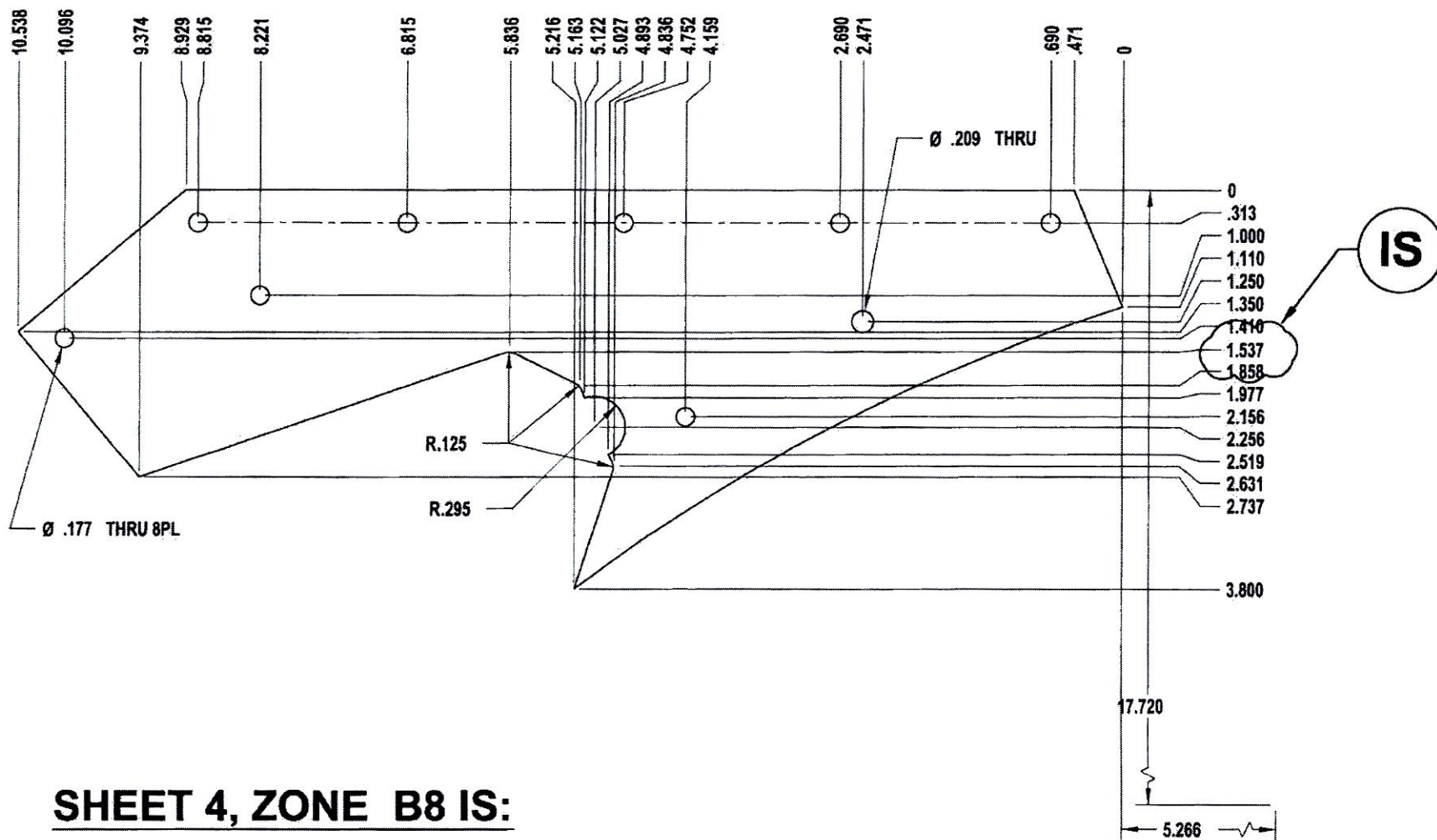
CHANGE CATEGORY

☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED

☐ YES ☒ NO

APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 03724				SHEET 1 OF 1	
	DWG NO. 646.3300	REV: N/C	PREPARED BY B. PETERS	DATE: 12/05/12	EFFECT ON DWG ☐ INC. ☒ UNINC.	
	DWG TITLE: UPPER CUTTER ASSY					
	APPROVED BY: ENGR <i>[Signature]</i>	MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF: NEXT ORDER		
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE	REASON: REVISED ORDINATE DIMENSION.				ECR: D-12-025	

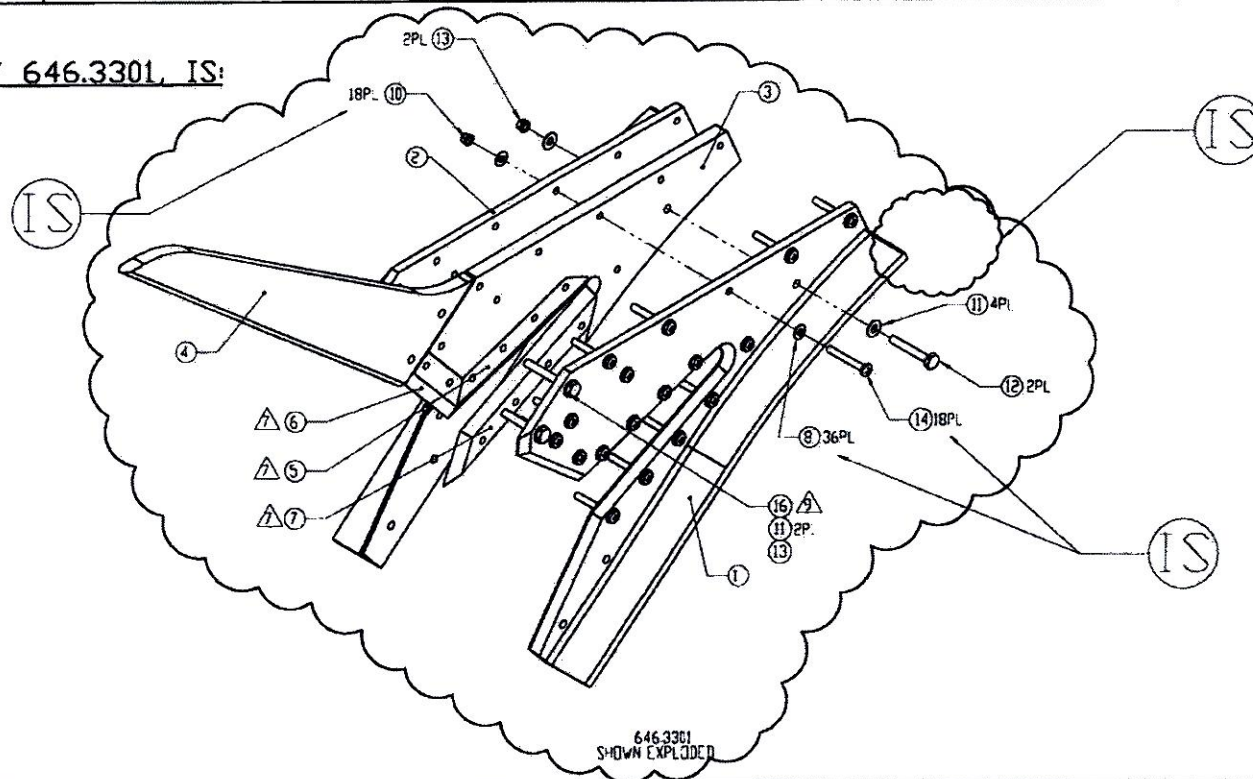


SHEET 4, ZONE B8 IS:

DOCUMENTS EFFECTED:	☐ RFMS ☐ MDL ☐ INSTALL INSTRU ☐ ICA ☐ BOM	CHANGE CATEGORY ☐ MAJOR ☒ MINOR	DER REVIEW REQUIRED ☐ YES ☒ NO
---------------------	--	---	--

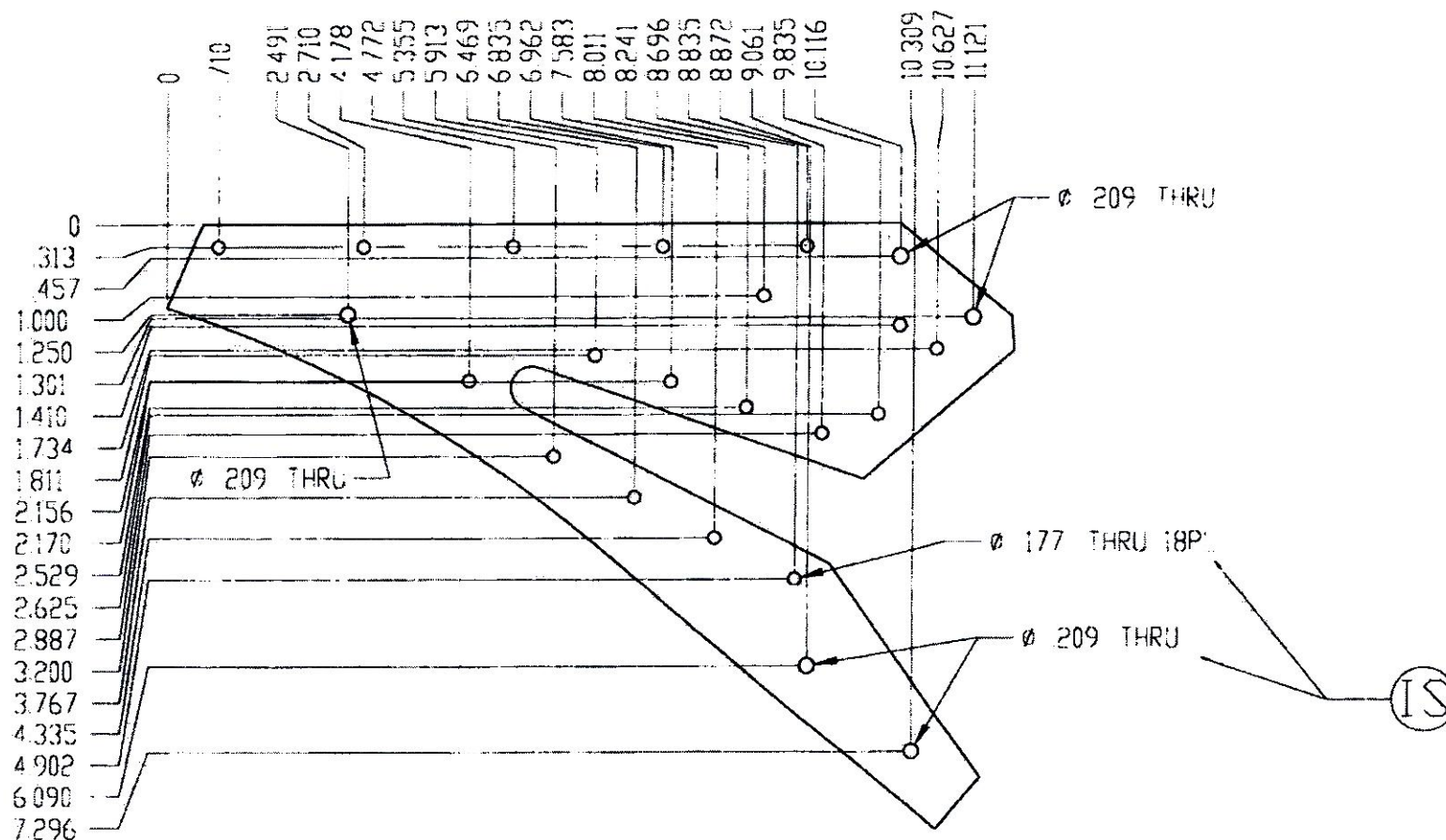
APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 02196		SHEET 1 OF 2	
	DWG NO. 646.3300	REV: N/C	PREPARED BY S. HUFF	DATE: 01/05/09
	EFFECT ON DWG ☐ INC. ☒ UNINC.			
	DWG TITLE: UPPER CUTTER ASSY			
APPROVED BY: ENGR <i>[Signature]</i>		MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF: NEXT ORDER
TRANSACTION CODES (TC) A-ADD C-CREATE R-REVISE D-DELETE		REASON: REMOVED RIVETS IN FAVOR OF ADDITIONAL SCREWS		

SHEET 1, VIEW 646.3301, IS:



14	R	601.2765		18	SCREW	MS27039-0819
10	R	601.1541		18	LOCKNUT	MS21042L08
9	D	601.2766		3	RIVET	MS20470AD5-18
8	R	601.2764		36	WASHER	NAS1149FN832P
				.3301		
F/N TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION		
DOCUMENTS EFFECTED:						CHANGE CATEGORY
☐ MDL ☒ INSTALL INSTRUC ☒ ICA ☐ FMS ☒ BOM						DER REVIEW REQUIRED
						☐ YES ☒ NO

SHEET 3, SECTION VIEW A-A, IS:



SECTION A-A

F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION

1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12

2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III,
CLASS 2, COLOR BLACK;
CARDINAL 4860-50 PRETREATMENT PRIMER
PRIME IAW MIL-P-23377J TYPE I CLASS N

3 MATERIAL: AISI A2 TOOL STEEL
CONDITION: ANNEALED
POST PROCESS: HEAT TREAT TO 58-62 Rc ROCKWELL HARDNESS

4 FINISH: PRIME IAW MIL-P-23377J TYPE I CLASS N

5. DEBURR AND BREAK ALL SHARP EDGES EXCEPT WHERE OTHERWISE NOTED

6. IDENTIFY IAW MPP-120

7 APPLY F/N 15 AS REQUIRED TO ALL FAYING SURFACES OF F/N 5, 6 & 7 UPON ASSEMBLY

8 CUTTING EDGE INTENDED TO BE SHARP, DO NOT BREAK SHARP EDGE

9 INSTALL FASTENER FINGER-TIGHT

646.3301
SHOWN EXPLODED

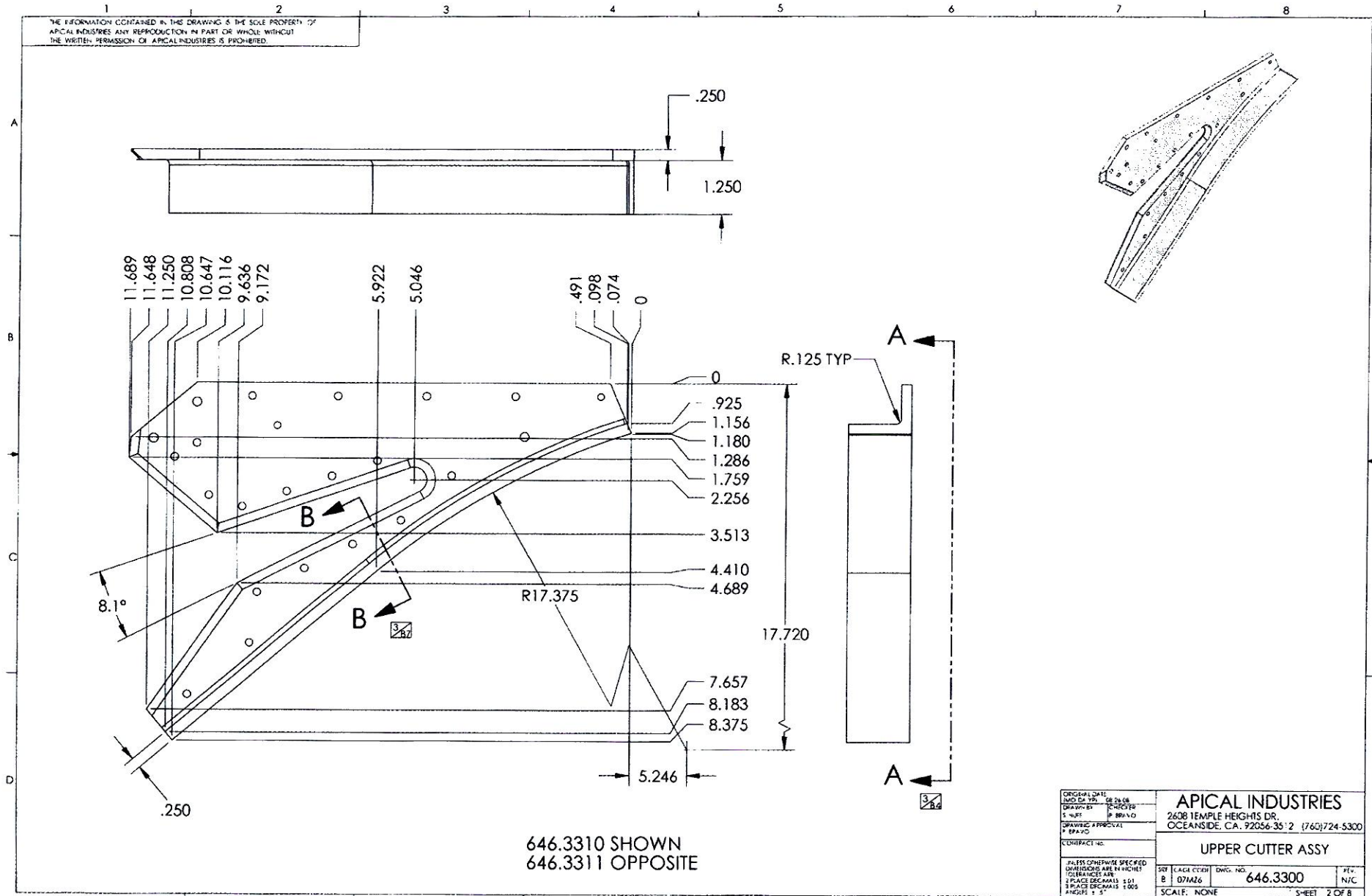
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

UNINCORPORATED ECN(S)

02196, 03724, 04765

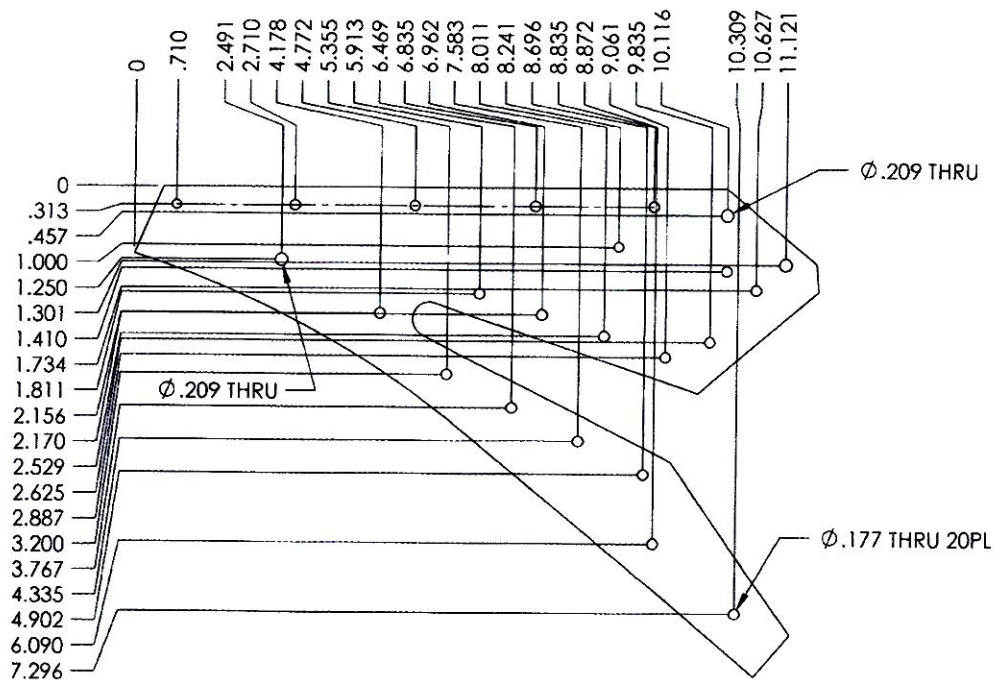
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THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

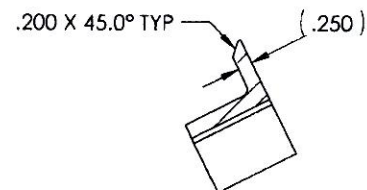


ORIGINAL DATE UNDOED YES NO 28-08		APICAL INDUSTRIES	
DRAWN BY S. HOFF		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
CHECKED BY P. BRAYO		UPPER CUTTER ASSY	
DRAWING APPROVAL P. BRAYO		CONTRACT NO.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1 PLACE DECIMALS ±.01 2 PLACE DECIMALS ±.005 ANGLES ±.5°		SHEET B 07/12/26	DWG. NO. 646.3300
SCALE: NONE		PEN N/C	
		SHEET 2 OF 8	

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SECTION A-A

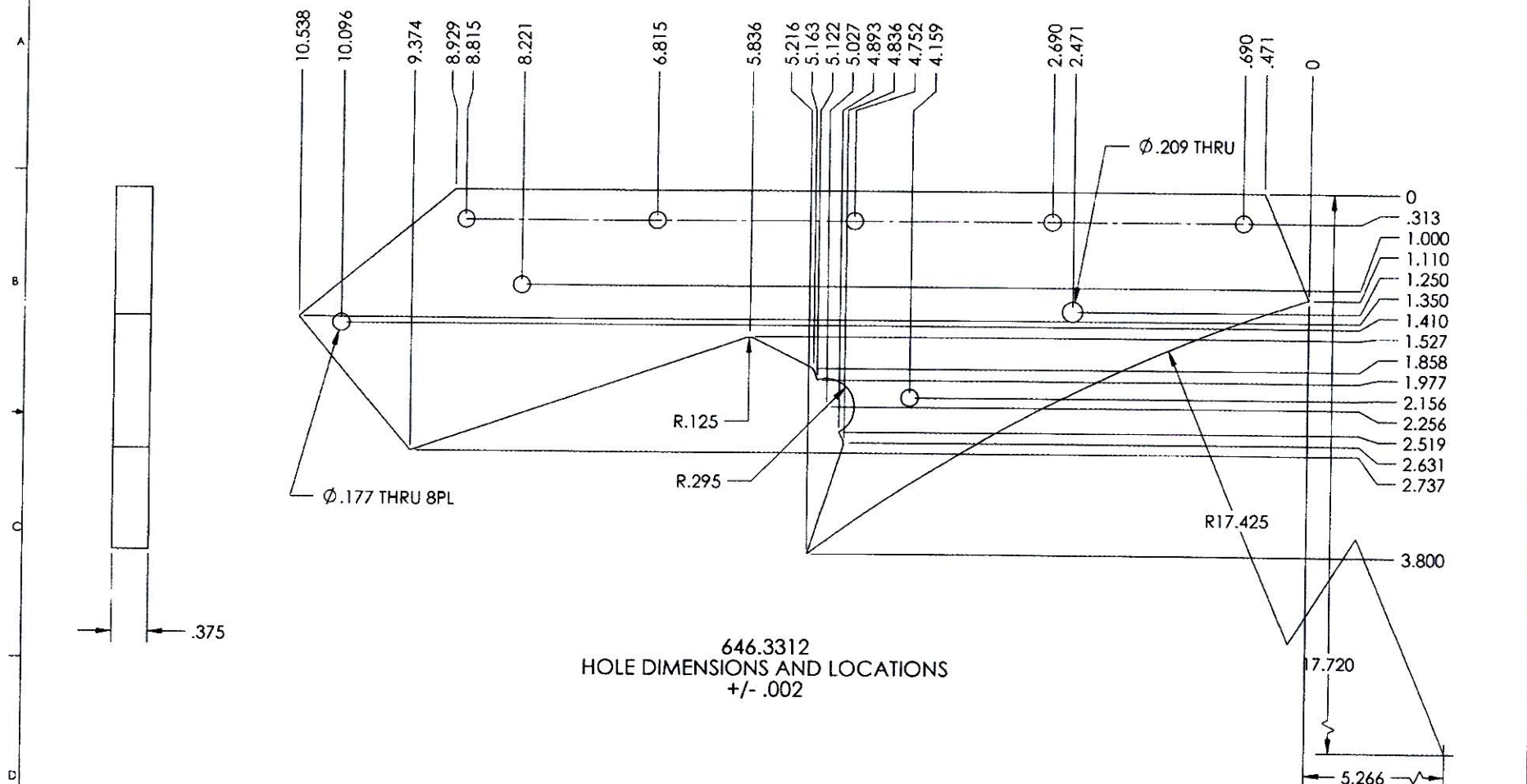


SECTION B-B

ORIGINAL DATE 10/24/90		APICAL INDUSTRIES	
DRAWN BY S. HUB		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724 5300	
CHECKED BY D. BRAVO		UPPER CUTTER ASSY	
DRAWING APPROVAL			
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.001 ANGLES ±.5°		REV. N/C	REV. N/C
DATE	07/24/96	QWTS. NO.	646.3300
SCALE	NONE	SHEET 3 OF 8	

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REVISIONS		
REV.	DESCRIPTION	DATE / APPROVED

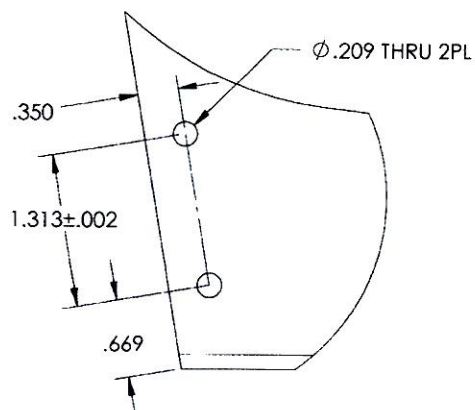
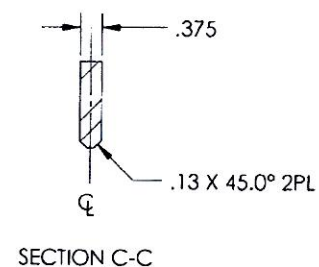
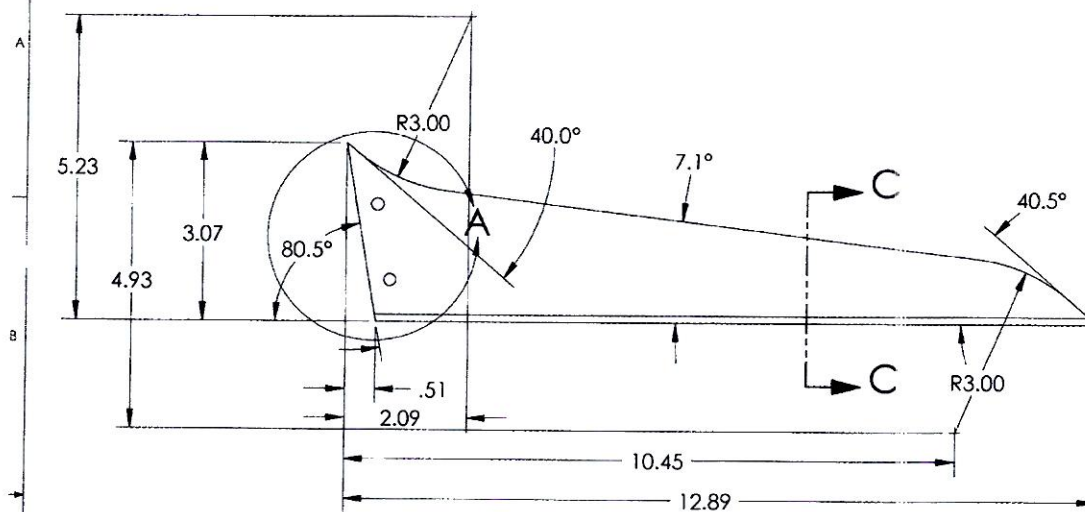


646.3312
HOLE DIMENSIONS AND LOCATIONS
+/- .002

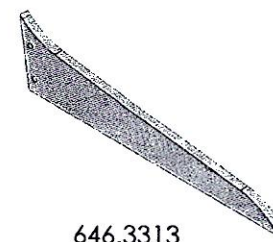
ORIGINAL DATE: 08-28-08 DRAWN BY: P. BRAVO CHECKED BY: P. BRAVO DRAWING APPROVAL: P. BRAVO CONTRACT NO.:		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS .001 2 PLACE DECIMALS .005 1 PLACE .5		SHEET: 07M26 SCALE: NONE	REV: N/C SHEET: 4 OF 8

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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



DETAIL A

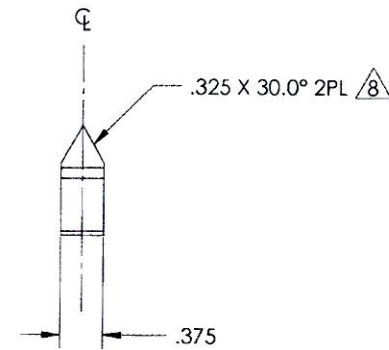
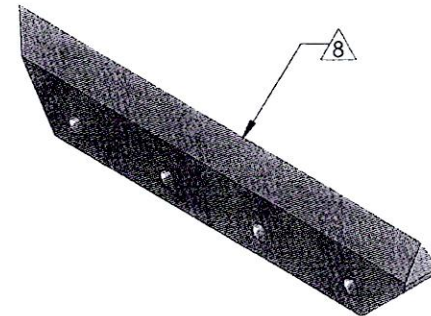
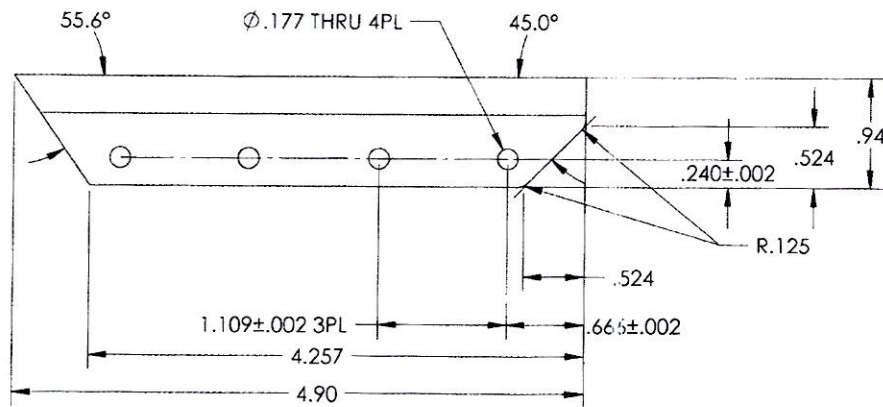


646.3313

ORIGINAL DATE AND DESIGNED BY SHEET		DESIGNED BY SHEET		CHECKED BY SHEET	
DRAWING APPROVAL BY DATE		SCALE NONE		SHEET 5 OF 6	
APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300				UPPER CUTTER ASSY	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS: ±.01 3 PLACE DECIMALS: ±.005 ANGLES: ±.5°		SIZE [CAGE CODE] B 07M26	DWG. NO. 646.3300	REV. N/C	

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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

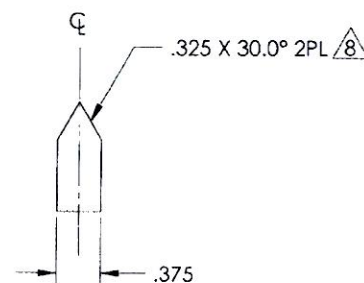
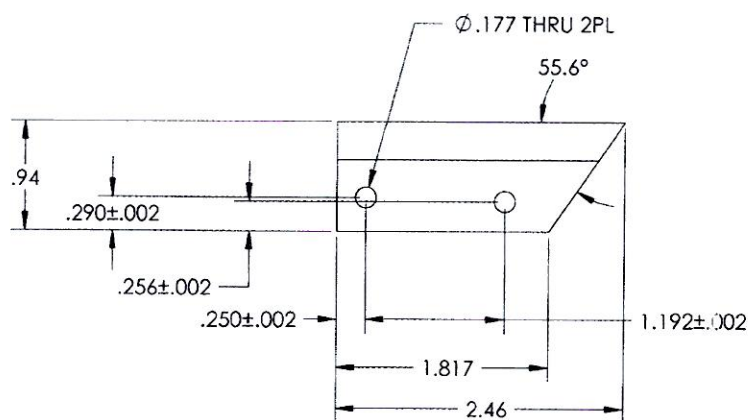
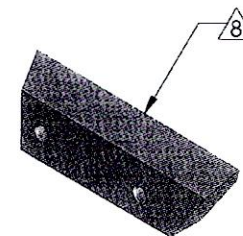


646.3314

ORIGINAL DATE: 1/20/01		28 PAGE	
DRAWN BY: S. HUI	CHECKED BY: P. BRAY	APICAL INDUSTRIES	
DRAWING APPROVAL: P. BRAY		2608 TEMPLE HEIGHTS DR.	
CORRECTIONS:		OCEANSIDE, CA 92056-3512 (760)724-5300	
IF LESS OTHERWISE SPECIFIED		UPPER CUTTER ASSY	
DIMENSIONS ARE IN INCHES		1ST SCALE CODE: B	2ND SCALE CODE: 646.3300
TOLERANCES ARE:		3RD SCALE CODE: 07M26	REV: N/C
2 PLACE DECIMALS ±.01		SCALE: NONE	
3 PLACE DECIMALS ±.005		SHEET: 6 OF 8	
ANGLES: ±.5°			

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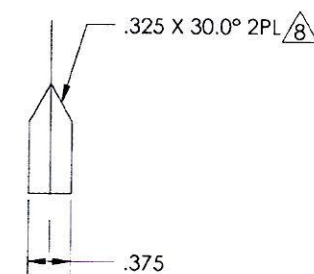
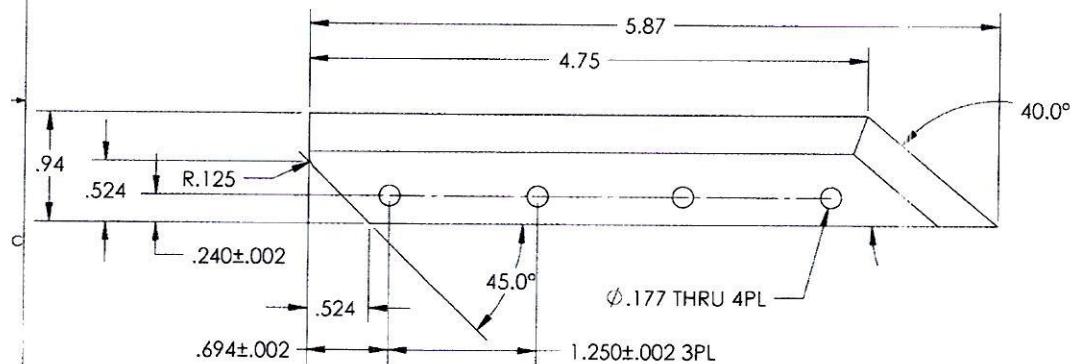
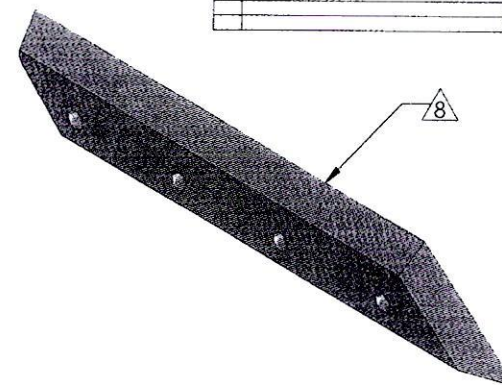
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



646.33 5

ORIGINAL DATE 1/10/11		APICAL INDUSTRIES	
DRAWN BY: J. NICKER		2608 TEMPLE HEIGHTS DR.	
S. NUFF		OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWING APPROVAL P. BRAYO		UPPER CUTTER ASSY	
CONTRACT NO.		646.3300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		REV: 07/12/11	REV: N/C
SCALE: NONE		SHEET 7 OF 8	

REV.	DESCRIPTION	DATE	APPROVED



646.3316

ORIGINAL DATE ISSUE DATE	10-26-08	APICAL INDUSTRIES	
DRAWN BY CHECKED	WJ WJ	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760)724-5300	
DRAWING APPROVED BY	WJ	UPPER CUTTER ASSY	
CONTRACT No.	66366		
APPROVE CHAIRMAN DISCREET APPROVE CHAIRMAN DISCREET	1 2 3 4 5 6 7 8 9 10 11 12	SIZE SCALE	1/2" = 1" 07/26/06 646.3300
APPROVE CHAIRMAN DISCREET APPROVE CHAIRMAN DISCREET	1 2 3 4 5 6 7 8 9 10 11 12	SCALE NONE	3 SHEET 8 OF 8